

Title (en)

Crystallisation assisted membrane separation process

Title (de)

Kristallisierungsunterstütztes Membrantrennverfahren

Title (fr)

Procédé de séparation de membrane assistée de cristallisation

Publication

EP 2671845 A1 20131211 (EN)

Application

EP 12170700 A 20120604

Priority

EP 12170700 A 20120604

Abstract (en)

The invention is directed to a process for separating a compound from an aqueous feed stream wherein said compound is dissolved. The process of the invention comprises - adding a crystallisation agent to said feed stream, thereby causing at least part of said first compound to crystallise, resulting in a mixture of crystals and a liquid, - separating at least part of the crystals from the liquid, leaving a supernatant, - subjecting at least part of the supernatant to a membrane separation process, producing a concentrate; wherein the crystallisation agent comprises a second compound with a higher solubility in water than the first compound.

IPC 8 full level

C01D 3/16 (2006.01); **C01D 3/24** (2006.01)

CPC (source: EP US)

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C-Set (source: EP)

B01D 2311/04 + **B01D 2311/12** + **B01D 2311/26**

Citation (applicant)

- WO 2004096404 A1 20041111 - AKZO NOBEL NV [NL], et al
- WO 0072947 A1 20001207 - TNO [NL], et al
- NL 2012050854 W 20121205
- T.G. ZIJLEMA: "The Antisolvent Crystallization of Sodium Chloride", 1999, DELFT UNIVERSITY PRESS

Citation (search report)

- [X] WO 2004096404 A1 20041111 - AKZO NOBEL NV [NL], et al
- [A] DE 881190 C 19530629 - ICI LTD

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CN110734168A; US11046598B1

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (application)

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